

Appl. No. 09/671,250
Amdt. dated July 2, 2004
Reply to Office action of Apr. 8, 2004

REMARKS/ARGUMENTS

Amendment to claims 12 and 17

Please note that claims 12 and 17 have been voluntarily amended to replace the definite term "the application proxy" with "an application proxy", and to replace the definite term "the packet filter" with "a packet filter", so that the necessary antecedents for these terms are now provided.

Amendment to claim 21

The Examiner has rejected claim 21 under 35 U.S.C. 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claim 21 has been amended such that it is now dependent upon claim 19 rather than claim 21. This was a typographical error. Claim 21 was always meant to be dependent on claim 19. Please note that claim 21 was not meant to be directly dependent on claim 17.

The phrase "The computer readable medium of claim 21 further comprising..." has been replaced by the phrase "The computer readable medium of claim 19 further comprising..."

Rejection under 35 U.S.C. 102(e) to claims 1-2, 4-6, 10-13 and 17-18

On page 3 of the Detailed Action, the Examiner has rejected claims 1-2, 4-6, 10-13 and 17-18 under 35 U.S.C. 102(e) as being anticipated by Baum et al., US Pat. No. 6,400,707. Anticipation is only established if all the elements of an invention, as stated in a patent claim, are

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identically set forth in a single prior art reference (see *Gechter v. Davidson*, 116 F.3d 1454, 1457, 43 USPQ2d 1030, 1032 (Fed. Cir. 1997); *Transclean Corp. v. Bridgewood Services, Inc.*, 290 F.3d 1364, 62 USPQ2d 1865 (Fed. Cir. 2002)).

Claim 1

Independent claim 1 of the present application is for “[a] firewall for Internet protocol packets carrying data for a real-time Internet application, each of said Internet protocol packets being associated with any one of a signaling channel, a control channel, or a bearer channel of said real-time Internet application, the firewall comprising: an application proxy and a packet filter, the firewall applying the Internet protocol packets associated with the signaling channel and the control channel to the application proxy, and the firewall applying the Internet protocol packets associated with the bearer channel to the packet filter” (emphasis added).

On page 3 of the Detailed Action, the Examiner has stated that Baum discloses a firewall comprising, in part, “an application proxy”. Applicant respectfully submits that Baum does not disclose “an application proxy”, and, in fact, teaches away from the use of an application proxy.

An application proxy, as taught by the present application, “operates at the upper levels of the protocol stack such as the application layer and presentation layer and provides proxy services on external networks for protected internal clients. The role of an application proxy is to communicate with external services on behalf of a client” (emphasis added) (pgs. 1-2 of the present application). And, in particular, the invention in the present application “relates to a firewall which is optimized for use with real-time Internet applications such as voice, fax, video or multimedia. The firewall includes an application proxy operating at the application layer (layer 7) for a portion of the real-time Internet application, and a packet filter operating at the network layer (layer 3) and the transport layer (layer 4) for another portion of the real-time Internet application” (emphasis added) (pg. 3 of the present application).

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By contrast, Baum discloses a "control processor" that "generates a set of security specifications, compiles a filter message, and sends this to the filter or firewall via the RS 232 connection. The firewall now sets up a very specific filter for this single conversation. The filter will include source and destination, IP addresses, packet size and protocol and port. The firewall reconfigures in accord with RS 232 reconfiguration message it received from the control processor. The firewall filter now monitors every packet that follows for conformance with the strict filter requirements. The control processor drops out and turns to other set-ups" (col. 7, lines 42-52) (emphasis added).

It is respectfully submitted that the Examiner has equated the "control processor" of Baum with the "application proxy" of claim 1 of the present application. Applicant respectfully submits that the "control processor" disclosed in Baum, and the "application proxy" claimed in the present application, are clearly distinct elements. The "control processor" disclosed in Baum: (i) does not provide proxy services on external networks for protected internal clients, (ii) does not appear to operate at the upper levels of the protocol stack, and (iii) does not perform the role of an application proxy, which is to communicate with external services on behalf of a client. According to Baum, instead of performing the role of an application proxy, the control processor "drops out" of the conversation once the packet filter is set-up (col. 7, line 52).

As noted above, Baum expressly teaches away from the use of an application proxy. Baum discloses that:

"[a]nother possible approach to the problem which has been suggested is the use of a proxy server or proxy application for purposes of providing a firewall. However, while this might be considered for a very low number of users, latency increases exponentially as the number is increased. Application proxies would not be capable of handling the number of calls expected in this application except at prohibitive cost" (col. 2, lines 28-35) (emphasis added).

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As noted above, anticipation is only established if all the elements of an invention, as stated in a patent claim, are identically set forth in a single prior art reference. However, Baum clearly does not disclose an "application proxy", and therefore does not anticipate claim 1. Applicant therefore respectfully requests that the Examiner withdraw the 35 U.S.C. 102(e) rejection of claim 1.

Claims 2, 4-6 and 10-11

For the foregoing reasons in respect of claim 1, Applicant submits that Baum does not disclose all of the elements of claims 2, 4-6, and 10-11 which depend on claim 1, and that therefore, Baum does not anticipate claims 2, 4-6, and 10-11. Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. 102(e) rejections of claims 2, 4-6 and 10-11.

Claims 12-13 and 17-18

On pages 5-6 of the Detailed Action, the Examiner has rejected claims 12-13 and 17-18 under 35 U.S.C. 102(e) as being anticipated by Baum et al., *supra*.

Independent claim 12 of the present application is for "[a] method of protecting a computer network transmitting and receiving Internet protocol packets formatted in accordance with a real-time Internet protocol, each of said Internet protocol packets being associated with any one of a signaling channel, a control channel, or a bearer channel," where the method cited includes the step of "applying the Internet protocol packets associated with the signaling channel and the control channel to an application proxy" (emphasis added). (As noted above, Applicant has voluntarily amended claim 12 to provide an antecedent basis for the terms "the application proxy" and "the packet filter" which are used in dependent claims).

Independent claim 17 of the present application is for "[a] computer readable medium containing computer instructions for protecting an Internet Protocol network transmitting and

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receiving Internet protocol packets formatted in accordance with a real-time Internet protocol, each of said Internet protocol packets being associated with any one of a signaling channel, a control channel, or a bearer channel,” where the computer readable medium includes program code for “applying the Internet protocol packets associated with the signaling channel and the control channel to an application proxy” (emphasis added). (As noted above, Applicant has voluntarily amended claim 17 to provide an antecedent basis for the terms “the application proxy” and “the packet filter” which are used in dependent claims).

An “application proxy” is therefore an element of both independent claims 12 and 17.

On page 5-6 of the Detailed Action, the Examiner has identified the “gateway and control processor” of Baum (col. 6, line 66 – col. 7, line 16), as an application proxy. Applicant respectfully submits that the “gateway and control processor” disclosed in Baum, and the “application proxy” claimed in the present application, are clearly distinct elements.

As submitted above, the “control processor” disclosed in Baum, does not, itself, act as an application proxy. In fact, instead of performing the role of an application proxy, the control processor “drops out” of the conversation once the packet filter is set-up (col. 7, line 52). The “gateway” disclosed in Baum, merely provides an authorization service during the set-up of a call (col. 7, Lines 25-36). Nowhere does Baum disclose that the “control processor”, the “gateway”, or the “gateway and control processor” together, act as an application proxy. The “gateway and control processor” disclosed in Baum do not provide proxy services on external networks for protected internal clients, do not appear to operate at the upper levels of the protocol stack, and do not perform the role of an application proxy, which is to communicate with external services on behalf of a client. In fact, instead of performing the role of an application proxy, the control processor disclosed in Baum “drops out” of the conversation once the packet filter is set-up (col. 7, line 52).

Indeed, as noted above, Baum expressly teaches away from the use of an application

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proxy (col. 2, lines 28-35).

Baum therefore does not disclose the "application proxy" of claims 12 and 17.

In view of the aforesaid, Baum does not anticipate claims 12 and 17, nor claims 13 and 18 which depend therefrom. Applicant therefore respectfully requests that the Examiner withdraw the 35 U.S.C. 102(e) rejections of claims 12-13 and 17-18.

Rejection under 35 U.S.C. 103(a) to claims 3, 7-9, 14-16 and 19-21

On page 7 of the Detailed Action, the Examiner has also rejected claims 3, 7-9, 14-16 and 19-21 under 35 U.S.C. 103(a) as being unpatentable over Baum et al., *supra*.

In rejecting claims under 35 U.S.C. 103, the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed matter to a person of ordinary skill in the art (In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) quoting In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination (In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987)).

As submitted above, with respect to the Examiner's rejections of claims 1-2, 4-6, 10-13 and 17-18, Baum does not disclose an "application proxy".

Claims 3 and 7-9 are dependent on claim 1, and therefore include the "application proxy" of claim 1. As noted above, if the combination of prior art does not produce the claimed invention, there can be no *prima facie* case of obviousness. As Baum does not disclose an "application proxy," the combination of prior art does not produce the claimed invention. Therefore, Applicant

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respectfully submits that no *prima facie* case of obviousness has been established for claims 3 and 7-9, and claims 3 and 7-9 are patentable over Baum.

Similarly, claims 14-16 and 19-21 are dependent on claims 12 and 17, and therefore include the "application proxy" of claims 12 and 17. As noted above, since Baum does not disclose an "application proxy," there can be no *prima facie* case of obviousness as the combination of prior art does not produce the claimed invention. Therefore, Applicant respectfully submits that no *prima facie* case of obviousness has been established for claims 14-16 and 19-21, and claims 14-16 and 19-21 are patentable over Baum.

Applicant believes that all the Examiner's objections have been answered by all of the foregoing, and Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If there are any outstanding issues, the Examiner is respectfully requested to telephone the undersigned.

In view of the forgoing, early favorable consideration of this application is earnestly solicited.

Respectfully submitted,

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